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Employment

- 2021- Researcher, Department of Astronomy, Stockholm University
- 2018-2021 Postdoctoral Research Associate, Department of Physics and Astronomy, Texas A&M University
- 2015-2018 Postdoctoral Research Associate, The Observatories of the Carnegie Institution for Science

Education

- 2015 Ph.D, Heidelberg University
Title: "An Observational Study of Metal-Poor Stars"
Supervisor: Prof. Norbert Christlieb (N.Christlieb@lws.uni-heidelberg.de)
- 2011 M.Sc, Copenhagen University
Title: "Formation of the Heavy Elements in the Early Galaxy"
Supervisor: Prof. Johannes Andersen (ja@astro.ku.dk)
- 2008 B.Sc, Dark Cosmology Center, Copenhagen University
Title: "Characterization of Dark Matter by X-ray"
Supervisor: Director DTU space Kristian Pedersen (kp@space.dtu.dk)

Grants

- P.I. Swedish Research Council Starting Grant: SEK 4,000,000 (2022-2025)
- P.I., NASA *Hubble Space Telescope* GO-15951: \$27,157, total= \$147,794 (2020-2023)
- Texas A&M University System National Laboratories Office travel mini-grant \$1,500 (2020)
- Heidelberg Graduate School of Fundamental Physics travel grant: €1,276 (2012)

Honors and Awards

- Mitchell Astronomy Fellow, Texas A&M University (2018-2021)

Professional Activities

- Co-founder and leader of *R-Process Alliance* Collaboration
- Maunakea Spectroscopic Explorer Science Team Member

Member of the Dark Energy Survey

Member of S5 Collaboration

Member of MagLiteS Collaboration

Organizer of Joint Nuclear and Astronomy Seminar at Texas A&M University (2019 - 2021)

Organizer of Astronomy Postdoc meetings at Texas A&M University (2020 - 2021)

Manuscript referee for the Astrophysical Journal, Astronomy & Astrophysics, Astronomy Nature, Publications of the Astronomical Society of Japan

NASA proposal reviewer (HST and ADAP)

Scientific organizing committee, "R-Process Alliance Workshop", Boston, US, November 2019

Scientific organizing committee, "CEMP Stars as Probes of First-Star Nucleosynthesis, the IMF, and Galactic Assembly", Geneva, Switzerland, September 2019

Invited Conferences and Workshops

Dec 2020 JINA Horizons, Online

"R-Process Alliance: Observations of Stellar Abundances"

January 2020 Chemical Evolution of Galaxies: The Next 25 Years, Sexten, Italy

"The Galaxy that has it all"

May 2019 The Radiating Universe, Shanghai, China

"The R-Process Alliance - a New Spectroscopic Search for R-Process Enhanced Stars"

February 2019 Massively multiplexed spectroscopy with MSE, Tucson, US

"Report from SWG2: Chemical Nucleosynthesis"

July 2018 The Metal-Poor Galaxy, Ringberg, Germany

"New Search for R-Process Enhanced Stars"

June 2018 Stellar Abundances in Dwarf Galaxies, AAS 232, Denver, US

"CEMP Stars in Dwarf Galaxies"

December 2017 GW170817: The First Double Neutron Star Merger, Santa Barbara, US

"Rapid Neutron-Capture Process -Clues From Metal-Poor Stars"

June 2017 Fifty-One Erg 2017, Corvallis, US

"Exploring Nucleosynthesis in the Early Universe with Extremely Metal-Poor Stars"

March 2016 JINA-CEE Frontiers in Nuclear Astrophysics, South Bend, US

"Recent Observational Results for Metal-Poor Stars"

Contributed Conferences and Workshops

- February 2020 Precision Spectroscopy workshop, Online
Talk: "A Chemodynamical Link Between Gjöll and NGC 3201"
- March 2019 *R*-process Sources in the Universe, Phoenix, US
Talk: "The R-Process Alliance - a New Search for *R*-Process Enhanced Stars"
- November 2017 A Celebration of CEMP and Gala of GALAH, Melbourne, Australia
Talk: "CEMP Stars in Dwarf Galaxies"
- July 2017 Electromagnetic Signatures of *r*-process Nucleosynthesis in Neutron Star Binary Mergers, INT workshop, Seattle, USA
- February 2017 APOGEE collaboration meeting, Pasadena, US
Talk: "Chemically Peculiar Metal-Poor Stars"
- February 2017 The Galactic Renaissance symposium, Pasadena, US
- January 2017 Neutron star mergers: From gravitational waves to nucleosynthesis, Hirscheegg 2017 workshop, Austria
Talk: "R-Process-Enhanced Metal-Poor Stars in the Milky Way Halo and its Satellites"
- August 2015 IAU symposium 317, The General Assembly of Galaxy Halos: Structure, Origin and Evolution, IAU General Assembly, Honolulu, Hawaii, US
Talk: "Exploring the Early Universe with Extremely Metal-Poor Stars"
- August 2014 Nucleosynthesis and Chemical Evolution: Recent Progress and Future Directions, INT workshop, Seattle, USA
Talk: "An Observational Study of Extremely Metal-Poor Stars"
- July 2014 XIII International Symposium on Nuclei in the Cosmos, Debrecen, Hungary
Talk: "New Abundances from Very Old Stars"
- November 2013 German Women in Physics, Heidelberg, Germany
Talk: "The Origin of Carbon-Enriched Stars in the Early Galaxy"
- May 2013 Nuclear Physics in Astrophysics VI, Lisbon, Portugal
Talk: "Abundance Analysis of Extremely Metal-Poor Stars"
- August 2012 XII International Symposium on Nuclei in the Cosmos, Cairns, Australia
Poster: "Formation of the Heavy Elements in the Early Universe"
- May 2012 Open Questions in Galactic Chemical Evolution, Heidelberg, Germany
- March 2012 9th Russbach workshop on Nuclear Astrophysics, Russbach, Austria
Poster: "Formation of the Heavy Elements in the Early Universe"
- June 2011 Danish Physical Society Meeting, Nyborg, Denmark
Talk: "Heavy Element Enrichment in the Early Universe"
- March 2011 Nordic Physics Meeting, Helsinki, Finland
Poster: "Formation of the Heavy Elements in the Early Universe"

Seminar and Colloquium Talks

April 2021 Astronomy Seminar, Ohio University
April 2021 Astronomy Seminar, University of Sao Paulo, Brasil
April 2021 Astronomy Seminar, University of Notre Dame, US
December 2020 Astronomy Colloquium, Stockholm University, Sweden (cancelled due to covid)
November 2020 IReNA Online Seminar
May 2020 Astronomy Colloquium, University of Florida, US
March 2020 Astronomy Seminar, Los Alamos National Lab (cancelled due to covid)
May 2019 Astronomy Seminar, Universidad Diego Portales, Chile
February 2019 Astronomy Seminar, Texas A&M University, US
October 2018 Astronomy Colloquium, Carnegie Observatories, US
January 2018 Astronomy Seminar, Geneva Observatory, Switzerland
July 2017 Astronomy Seminar, Texas A&M University, US
June 2014 SFB Seminar, Heidelberg University, Germany
March 2014 IMPRS Seminar, Heidelberg University, Germany
June 2013 IMPRS Seminar, Heidelberg University, Germany

Successful P.I. Observing Proposals

Las Campanas Observatory, Chile, du Pont Telescope: 52 nights (2016-2019), Instruments: Echelle spectrograph
Las Campanas Observatory, Chile, Magellan Telescopes: 18 nights (2016-2019), Instruments: MIKE, M2FS
McDonald Observatory, US, Harlan J. Smith Telescope: 46 nights (2019-2021), Instruments: Cross-Dispersed Echelle Spectrograph
Hubble Space Telescope, cycle 27, 17 orbits (2020), Instrument: STIS

Undergraduate Student Mentoring

Spring 2021 Elyse Harman, Texas A&M University, 'Binary properties of CEMP-no stars'
2020 - 2021 Jared Cathey, Texas A&M University, Honors thesis, 'Radial Velocity Properties of Binary CEMP-r/s Stars.'
2020 - 2021 Daniel Huerta, Texas A&M University, 'Metallicities of Mdwarf Binary Companions.'
2020 - 2021 Jordan Hosein, Texas A&M University, 'Stellar Parameters for Mdwarf Binary Companions.'
Fall 2020 Ryan Albert, Texas A&M University, 'Location of the α -Knee in Dwarf Galaxies.'

2019 - 2020 Jessica Myron, Texas A&M University, Undergraduate Thesis, 'How Universal is the Universal R-Process Abundance Pattern?'

2019 - 2020 Brittany Vamvakias, Texas A&M University, 'Abundances of Limited R-Process Enhanced Stars'

2019 - 2020 Isobel Austin, Texas A&M University, 'Radial Velocities of Mdwarf Binary Companions.'

June, July 2019 Carla Quintero, Humboldt State University, REU program, 'Characterizing the Neutron-Capture Element Abundances of CEMP Stars.'

June, July 2018 Tiger Lu, Caltech, Carnegie summer student program, 'Investigating the Slow Neutron-Capture Process in the Early Universe.'

Teaching Experience

2016 - Present Training of undergraduate and graduate students during multiple observing runs at Las Campanas and McDonald Observatories.

October 2020 Order of Magnitude graduate class (1 lesson) Texas A&M University

June 2019 REU summer students introduction lecture on galactic chemical evolution

July 2017 Carnegie summer students poster workshop.

July 2016 Carnegie summer students introduction lecture on galactic chemical evolution.

April - July 2012 Teaching Assistant, Exercises for the lecture Introduction to Astronomy II, University of Heidelberg. Creating and walk through of exercises, correcting/grading exercises and exam sheets.

Computational Skills

IDL, MOOG, LaTeX, IRAF, Python, DS9

Outreach and Public Talks

March 2021 WISE (Women In Science and Engineering) talk at Jerry Knight STEM Career Week and event on rainbows for St. Patrick's day

September 2019 Talk at Brazos Valley Astronomy Club, College Station, TX
Grus II the Galaxy that has it All.

May 2019 Talk at public viewing night at McDonald Observatory
The Origin of the Elements

February 2019 Astronomy on tap, College Station, TX

October 2017 Talk at Santa Monica Astronomical Society
Galactic Chemical Evolution.

October 2016, 2017, 2018 Carnegie Open House - Ask an astronomer.
Answer questions from the public on all things related to astronomy.

April 2016 TechSavvy, Pasadena City College, Astronomy workshop - build your own telescope

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